

CITY OF MIAMI BEACH
Office of the City Manager



Letter to Commission No. 307-2004

To: Mayor David Dermer and Members of the City Commission

Date: December 9, 2004

From: Jorge M. Gonzalez
City Manager

A handwritten signature in cursive script, appearing to read "Jorge".

Subject: 900 Collins Avenue – Coral Rock Home
Demolition Status Report

On November 17, 2004, the Miami-Dade County Unsafe Structures Board continued action on the above noted structure to December 15, 2004, so that the City's Historic Preservation Board could evaluate potential alternatives to demolition. The owner of the subject property initiated engineering reports from John Pepper of the Pepper Engineering Group and Nasir Alam of Pistorino and Alam (see attached), both of which have concluded that the subject structure is unsafe, a structural hazard and should be demolished.

The Administration retained Mr. Herb Gopman of Gopman Consulting Engineers, to further evaluate the structure. His report, which is attached, shares some of the concerns of Mr. Pepper and Mr. Alam with regard to the current condition of the structure. Mr. Gopman did indicate that further testing and studies would be needed to determine whether the methodology for the retention of the exterior walls is feasible; Mr. Gopman also indicates that the preservation of the structure is possible if there exists the willingness to invest the funds for repair. However, Mr. Gopman also stated that any such endeavor would be "tedious, labor intensive and costly in material".

The Administration will be meeting with the owner of the property and his legal counsel on Friday, December 10, 2004, to further explore potential alternatives to demolition. The City's Historic Preservation Board will be discussing this matter at their December 14, 2004 meeting and the Unsafe Structures Board will consider it again on December 15, 2004.

The Administration will continue to update the Commission on the progress of this matter, as it proceeds to the Historic Preservation Board and the Unsafe Structures Board. If you have any questions relative to this property, or need additional information, please contact me.

JMG:CMC:JGG:TRM

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Attachments

- c: Murray Dubbin, City Attorney
- Gary Held, First Assistant City Attorney
- Rhonda Montoya, First Assistant City Attorney
- Bob Parcher, City Clerk
- Phil Azan, Building Official
- Jorge G. Gomez, Planning Director
- William Cary, Assistant Planning Director
- Thomas R. Mooney, Design and Preservation Manager

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THE
PEPPER
ENGINEERING
GROUP, INC.

04 NOV 18 PM 5:20
CITY OF MIAMI

Mr. Phillip Azan
Chief Building Official
Department of Building and Zoning
Miami Beach, Florida

RE: 900 Collins Avenue, Miami Beach, Florida

Dear Mr. Azan:

It is my professional opinion, considering my inspection of the condition of the above noted structure and my knowledge of building collapse, that the structure cannot be put in a safe condition due to the existing damage, degradation and its methods of construction.

Unlike a modern structure, the coral rock portions of the structure do not have sufficient structural capacity required to brace the walls at the top and span between the wood floor system, which is deteriorated or the outside side walk and also span between the braces.

Should the building further collapse, as we noted in the unsafe structures meeting, the unreinforced coral rocks may roll into adjacent areas including the 9th street and Collins Avenue and cause damage. It is our opinion that a normal chain link fence would not be sufficient to retain the potential debris.

Based on the above, we are regretfully unable to offer a plan to make the building safe and protect the Public from harm should an unplanned collapse occur.

Respectfully Submitted,

THE PEPPER ENGINEERING GROUP, INC.

John Pepper, P.E.

17Nov05

17 Nov 05



THE
PEPPER
ENGINEERING
GROUP, INC.

Mr. Ivor Rose
900 Collins LLC
1810 Michigan Avenue
Miami Beach, FL 33139

RE: 900 Collins Avenue,

Dear Mr. Rose:

At your request, this office performed two inspections of the above noted building. We did not have any plans and you informed us that the plans did not exist at the Miami Beach Building Department. The purpose of our inspection was to determine the structural condition of the building and to obtain the data necessary for a 40-year recertification.

We found a one-story structure of unknown age, but assumed to be about 80 years old based on the type of construction. The structure had additions to it, and these are also of an unknown age. We later reviewed a news paper article that stated that the original building was built in 1918 which sounds about right and other information about an addition being built in 1939 and an interior remodel being done in 2000.

When we entered the building, we noted an extremely heavy smell of mold. We found that this was due to the fact that a large portion of the roof framing had collapsed and many roof leaks occurred in other areas. This cut our inspection somewhat short as we did not have respirators with us and could not remain in the building very long. The second time we entered the building with hepa filter respirators and were able to take pictures and do some destructive testing to the floor area.

You informed us that this collapse was recent, likely caused by the last storms and that the area had not caved in as of your last inspection.

During our inspection, the following was noted:

1. The Coral Rock walls have many settlement cracks. Some of these, such as those in the northeast corner area very wide. Mortar was in a deteriorated condition.
2. The main roof framing of the home had collapsed. The top cord of the hand-framed roof is in place. The framing was seen to be sagging in other locations and will likely collapse further soon.
3. The window lintels where visible showed evidence of steel corrosion and concrete spalling.
4. The out side stairs to the south had settled and were visibly leaning. A large crack existed were this settlement affected the slab.
5. Wood windows and doors were seen to be rotted in many locations.

6. Windowsills were hollow sounding when tapped upon in some locations and spalling others. A hollow sound generally indicates corroded reinforcing beneath that has lost its bond.
7. A handrail was missing at the rear stair.
8. Water stains indicating roof leaks were seen in many other locations.
9. Many instances of rotted beams were seen specially where they contacted masonry walls.
10. When the floor was opened, past poor repairs were found and it was found that the floor was not attached to the interior foundations.
11. The building does not have straps from the walls the roof and had only minimal strength in uplift.
12. As noted, the mold, without respirators, was intolerable.

FLORIDA BUILDING CODE 2001:

The Florida Building Code 2001 (FBC) is the Code in effect. Section 3401.8 of the Code applies to existing buildings and structures located within the High Velocity Hurricane Zone. In Chapter 2, the Code defines that the High Velocity Zone consists of Broward and Dade counties. Pertinent portions of Section 3401.8 of the Code state the following:

3401.8.3 REPAIRS AND ALTERATIONS:

3401.8.3.1 Repairs and alterations not increasing the area of the building, made within any 12 month period, shall meet the requirements of this section.

3401.8.3.2 Structural repairs and alterations, the cost of which does not exceed 25 percent of the replacement value of the existing building or structure, shall comply with the requirements for new buildings or structures except that minor structural repairs and alterations may, with the approval of the Building Official, be constructed of the same materials and with the same degree of fire-resistively as the original building or structure.

3401.8.3.3 Non-structural repairs and alterations, the cost of which does not exceed 25 percent of the replacement value of the existing building or structure and which does not affect egress or fire-resistively, may comply with the requirements of the building code in effect at the time of original construction, except that repairs and alterations to plumbing, mechanical and electrical systems shall comply with the Code in effect at the time the permit for such work is issued.

3401.8.3.4 Repairs and alterations amounting to 25 percent but not exceeding 50 percent of the replacement value of the existing building may be performed without making the entire existing building comply with all of the requirements for a new building, provided such repairs and alterations comply with the requirements of this Code for a building of like area, height and occupancy.

3401.8.5 Where repairs and alterations amounting to more than 50 percent of the replacement value of the existing building are made during any 12 month period, the building or structure shall be made to conform to all the requirements for a new building or structure or be entirely demolished.

3401.8.5 VALUE DETERMINATION:

The value of a building or structure shall be the estimated cost of constructing a new building of like size, design and materials at the site of the original structure, assuming such site to be clear. Cost of additions, alterations and repairs shall be construed as the total cost of labor, materials and

services based on current prices for new materials.

3401.8.4 ROOFING:

3401.8.4 Roofing. Not more than 25 percent of the roof covering of any building or structure shall be replaced in any 12 month period unless the entire roof covering is made to conform to the requirements of this Code.

In order to repair this building, it would be necessary to reframe the roof, replace the roofing, do a complete mold remediation of the structure, including removal of all interior drywall, insulation and other porous surfaces using New York City level IV protocols (see attached), replace all windows and doors with hurricane resistant ones, do a complete concrete remediation project on the lintels and any other deteriorated concrete found after the building was stripped and repair the walls. The condition of the floors is unknown at this time but work will likely be necessary in that area also.

The cost of all this would easily exceed the 50% threshold quoted above and that would caused upgrades to be required on the electrical and mechanical systems and well as additional structural upgrades that that would be required.

If the building qualifies as an historic building under the requirements of 3401.5, some of the upgrade requirements might be lifted by the building department, but the building would still exceed the 50% limit on cost to repair and what you would have is a building that would be very costly to repair and maintain. What would exist after such a repair is a fragile building, not up to any code or reasonable safety standard and susceptible to hurricane winds.

CONCLUSION:

This building is currently unsafe and becoming more unsafe as it sits with the collapsed section of its roof allowing rainwater to freely flow into the structure. The collapsed and broken roof framing is a hazard that should be mediated as soon as possible as it may become flying debris in a future hurricane.

The building itself is not stable with its roof diaphragm damaged to the extent it is and walls are in danger of collapse in the event of another storm. Further roof framing will likely occur soon due to the weight of rain water ponding on the roof where the damaged framing is sagging.

The structure meets many of the criteria of unsafe structures code specifically Sec.8-5 (3) (b) 1,2,3 4 and 6 which are attached. We did not inspect other than structural items.

Note → It is also our opinion that its deteriorated condition and collapsed diaphragm roof render it a hazard to other buildings and people in the area in the event of tropical storm or hurricane.

Note → Our further opinion is that additional collapse of the roof system is imminent.

If we may be of further service to you in this matter, please call.

Sincerely,

THE PEPPER ENGINEERING GROUP, INC.,

John Pepper, P.E.

800104

FL PE 15073

8 Oct 04

Attached:

1. 40 year re-certification. Not approved for re-certification
2. SET low strength concrete and chloride report.
3. Section 8-5. Unsafe Structures.
- 2 Survey sheets.
4. 41 photographs
5. Level IV Mold Remediation Protocol.

Level IV Remediation: Extensive Contamination (greater than 100 contiguous square feet in an area)

A health and safety professional with experience performing microbial investigations should be consulted prior to remediation activities to provide oversight for the project. The following procedures are recommended:

- a. Personnel trained in the handling of hazardous materials equipped with:
 - i. Full-face respirators with high efficiency particulate air (HEPA) cartridges
 - ii. Disposable protective clothing covering both head and shoes
 - iii. Gloves
- b. Containment of the affected area:
 - i. Complete isolation of work area from occupied spaces using plastic sheeting sealed with duct tape (including ventilation ducts/grills, fixtures, and any other openings)
 - ii. The use of an exhaust fan with a HEPA filter to generate negative pressurization (-0.02 inches of water is recommended inside the containment)
 - iii. Airlocks and decontamination room
- c. Vacating people from spaces adjacent to the work area is not necessary but is recommended in the presence of infants (less than 12 months old), persons having undergone recent surgery, immune suppressed people, or people with chronic inflammatory lung diseases (e.g., asthma, hypersensitivity pneumonitis, and severe allergies).
- d. Contaminated materials that cannot be cleaned should be removed from the building in sealed plastic bags. The outside of the bags should be cleaned with a damp cloth and a detergent solution or HEPA vacuumed in the decontamination chamber prior to their transport to uncontaminated areas of the building. There are no special requirements for the disposal of moldy materials.
- e. Once the containment system is in place, remove carpet, carpet padding and tack strips if present in the contained area. Proceed to remove contaminated wall and ceiling materials including attic insulation to an area at least 18 inches beyond any visible growth or watermark. Where practical, it is recommended that the affected drywall materials be removed to an area equal to the size of a sheet of drywall to facilitate restoration.
- f. Following removal of contaminated materials, the contained area and decontamination room should be HEPA vacuumed and cleaned with a damp cloth and/or mop with a detergent solution and be visibly clean prior to the removal of isolation barriers

- g.** Disinfect surfaces to remain including exposed interstitial wall and/or ceiling spaces with spray and/or fog application with suitable broad-spectrum biocide.
- h.** Clean and disinfect all HVAC system components to remain including ducts and fan-coil units. HEPA vacuum horizontal surfaces and all furnishings located outside the contained area (s) following completion of work inside the containment system(s).
- i.** Conduct air monitoring prior to occupancy to determine if the work area is safe to reoccupy.



PISTORINO & ALAM

CONSULTING ENGINEERS, INC

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November 29, 2004

Mr. Michael Stern
1766 Michigan Ave
Miami Beach, FL. 33139

Phone: (305) 525-5535

Fax: (305) 534-5556

Re: Coral House at Collins Avenue and 9th Street – Miami Beach

Dear Mr. Stern:

Pursuant to your request, we have observed existing condition of the Coral House structure located at 900 Collins Avenue, Miami Beach. The original house structure consists of nine-inch thick coral rock exterior walls with an elevated wood floor. Roof structure consists of wood decking over wood rafters supported by exterior coral rock walls.

Southern section of the roof structure has collapsed. The exterior walls constructed of unreinforced coral stone support the existing structure. The exterior walls exhibit numerous cracks indicating structural distress. Existing exterior walls do not have the structural capacity to support lateral wind loads. A coral wall parapet, present on top of the roof, also does not have structural capacity to resist lateral wind loads. Existing exterior walls and the roof parapet may collapse during a normal windstorm. This house structure is located adjacent to the Ninth Street, which is open to the public. Collapse of the exterior walls or the roof parapet may be hazardous to life safety.

We recommend that a chain link fence be installed for protection at approximately 16-feet away from the south exterior wall of the house, on the ninth street pavement. Provisions must be provided to divert western bound traffic on 9th street if allowed by the City. Existing structure must be demolished to eliminate the hazardous conditions due to damaged and partially collapsed structure of the house.

Consideration was given to save the existing exterior coral rock walls due to its historical value. However, these walls cannot be saved in its existing form. Generally, it is possible to construct a structurally sound sister wall behind the wall to be preserved and pin the existing wall to the new. In this case construction of new sister walls along with their foundations will cause collapse of the existing damaged and weak exterior coral rock wall.

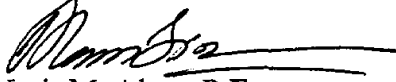
We recommend that existing walls must be demolished and pieces of coral rocks may be preserved, if possible. New properly designed exterior walls of reinforced concrete blocks or reinforced concrete must be constructed. Existing removed coral stones may be attached to the new walls to provide similar appearance.

Mr. Michael Stern
November 29, 2004
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Should you have any question or comment please feel free to call.

Very truly yours:

PISTORINO & ALAM CONSULTING ENGINEERS, INC.



Nasir M. Alam, P.E.
Principal





GOPMAN

CONSULTING ENGINEERS, INC.

192 N. E. 168 Street • North Miami Beach, FL 33162
Phone: (305) 493-3919 • Fax: (305) 770-0957

Design

Inspection

Investigation

Reports

City of Miami Beach Building & Zoning
1700 Convention Center Drive
Miami Beach, FL 33139

Post-It® Fax Note	7871	Date 12/7/04	# of pages 2
To	PHILLIP AZAN	From	HERB
Co./Dept.	CITY OF M.B.	Co.	GOPMAN CONS.
Phone #		Phone #	
Fax #	305 535 7513	Fax #	

Attn: Phillip Azan-Chief Building Official

RE: Coral Rock House-9th Street and Collins Avenue

In accordance with the request of officials of the City of Miami Beach, this Engineer was retained to inspect the above facility and render an opinion as to its structural integrity.

Description:

The Building is a single story single-family residential type structure; the exterior wall structural elements are of oolite coral rock, a very porous type stone of questionable strength, cemented together with masons' mortar. The floors are of lumber, possibly the old Dade County Pine and Span to supporting elements within the building interior as well as to the exterior walls. The roof system is of lumber intended to span to exterior bearing walls. Windows are double hung and framed with wood. The lintels over the windows appeared to be double 2 by wood members laid flat to carry the coral rock above. There is a stone parapet around the perimeter above the roofline along with a tile mansard. Construction of the building took place in 1918.

Deficiencies:

Deficiencies noted throughout the structure were building settlements on the south face, which caused large fractures in the coral stone, roof joists were not anchored and depended on the parapet weight above for anchorage. A large section of the roof had collapsed and was repaired inadequately and totally incapable of maintaining any additional load. This portion should be considered a structural hazard. What appeared to be wood window lintels is not a proper support, the floor system feels springy, indicating over spanned joists. Picture taken of the underside appear to substantiate this.

Repair:

In truth, anything can be repaired, whether it can be transformed into a functional state or is it economically feasible is another story. In order to render the walls stable the foundation of the

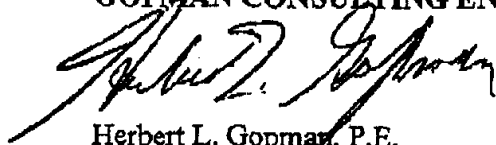
building would need to be analyzed and probably grouted and/or jacked, the walls would need to be stabilized by various means in order to assure the individual pieces are glued together. Since these methods cannot be proven mathematically, load testing would need to take place. The major portion of the existing roof would need to be replaced and redesigned and properly anchored so that a load path can be created from the anchored roof to the foundation. The existing floor joists would need to be exposed to determine where to install proper supporting elements. The parapet and tile mansard around the perimeter is very questionable as to its stability and very likely some external means of support and anchorage would need to be provided. To provide all of the above would be tedious, labor-intensive and costly in material. All of the aforementioned applications would have to be made in accordance with code regulations since the cost would most certainly exceed the fifty percent building value. This would include all mechanical, electrical, structural and building facilities.

Conclusion:

Unless there is a desire to preserve the building for posterity since it exists within the Miami Beach Historic District, and there exist the willingness to invest the funds for repair, the building should be demolished since it is currently a structural hazard. The building is no longer a viable residence and if it continues to remain in its current state the deterioration will continue more rapidly.

Respectfully submitted,

GOPMAN CONSULTING ENGINEERS, INC.



Herbert L. Gopman, P.E.
December 7, 2004

